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ADAPTATION OF THE CONCEPT OF WORLD CLASS MANUFACTURING (WCM) IN DIVISIONS OF MULTINATIONAL CORPORATION ON THE EXAMPLE OF LLC UNILEVER RUS KALINA

Abstract:

In this work assessment of efficiency of introduction of the concept of World Class Manufacturing (WCM) on the example of LLC Unilever Rus subsidiary Kalina. Object of research are optimization of production and logistic processes, WCM defining formation at the enterprise. Subject of investigation is optimization of production and logistic processes, WCM defining formation at the enterprise. Target of a research is the LLC «Unilever Rus» Kalina.

In the course a research the materials received in the course of practical work, given to financial statements are applied.

Keywords:

World Class Manufacturing (WCM); Lean Production; MNC; TNC.

Globalization forces firms to be more careful concerning satisfaction of the consumer and maximizing own profit. Therefore firms have to use various tools to increase the number of loyal clients who are less sensitive to incensement of the price of a product and have a big impact on

ensuring stable growth of commodity turnover and, as a result, growth of revenue of the company. The logistics is one of the key tools influencing the cost of production and forming competitive advantages of multinational corporation (MNC).

Adaptation to the current situation in the market moves the size of production capacities and at any changes the market makes new demands. The main aim for the company is customer satisfaction with the required quality, the variety of the released products at the price favorable for the client, and maintaining short terms of deliveries. Achievement of this purpose is possible by continuous improvement of operation from the enterprise.

On modern conditions of the market economy, effective organization of productions is the main reserve of the growth of the enterprise competitiveness. According to this, divisions of MNC in developing countries, aiming to improve the positions in the market, integrate world practices in the field of the organization of production and look for the ways to create effectively working production systems.

It is especially noted that the companies leaders constantly improve the quality of the delivered goods and services and at the same time reach the optimization of expenses through development and involvement of all staff of the organization in process of continuous improvement.

When studying foreign experience of the organization of production, Huge attention is paid to studying the foreign experience of the organization of production. It is possible to notice that rather large number of multinational corporation build the organization on the basis of the concept of the World Class Manufacturing (WCM), which means the production system of the world class representing the integrated model including various actions promoting the production process optimization based on the improvement of the quality of production, cut in expenditure at the preservation of flexibility of production.

Nowadays, the World Class Manufacturing includes 10 main directions: Safety, Cost Deployment, Focused Improvement, Autonomous Activity, Professional Maintenance, Quality Control, Customer Service & Logistics, People Development,

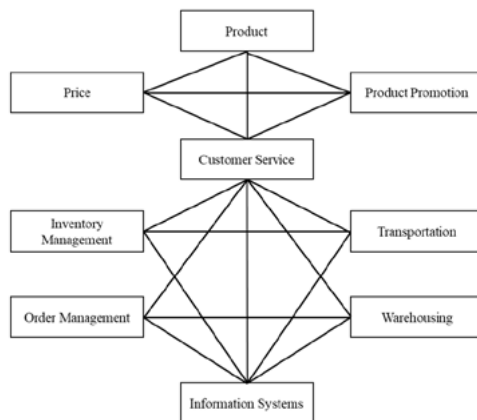
Equipment Management and the Environment. [1,6]

MNC could support constantly competitive level is required to improve constantly the components exerting direct impact on its stability and competitiveness have been for this purpose developed the WCM standards, following which MNC or any other company will be able to improve continuously all business processes, therefore, to be competitive and to open for itself the new markets. WCM is very expensive action therefore it can find the application only in MNC which have considerable capital potential, but the separate WCM elements can be applied also by representatives of business community.

The efficiency of development of MNC directly depends on development of logistic infrastructure. Continuous development of logistics at all levels, for successful realization of the strategy is required, to growth of competitiveness and optimization of cash flows.

Today MNC face such problem as lack of a unified information system when forming a chain of deliveries. Therefore for increase in logistic efficiency, especially within WCM adaptation, marketing has to not only form demand for a product. Creation of decisions in the field of distribution has to be, first of all, according to decision-making in the field of a product, it is caused by the fact that in process of increase in extent of distribution channels of production the final price of a product grows, as a result of it such negative effect as decrease in commodity turnover and the general competitiveness of a chain of deliveries of MNC appears. Minimization of such effect requires full integration and coordination between marketing and logistics of MNC. [7]

The main task of the concept of “integration” of marketing and logistics consists in constant exchange of information between all participants of supply chain. As a result of MNC has an opportunity to react in due time to changes of demand in domestic and foreign markets, to respectively be more competitive and profitable. Therefore it is very important to make correctly design of systematization of barter between all participants in chains of deliveries, interfacing technological features and economic opportunities of the enterprises.



Pic. 1. Connection between Marketing and Logistics [2,3]

The concept of interaction of marketing and logistics is the effective tool at the organization of marketing processes at all levels of barter, uniting in a uniform complex distributive operations of manufacturing enterprises with operations of purchase and a product's recycling in is wholesale - intermediary firms and marketing operations in retail trade enterprises. [3]

To provide of an effective logistics system within WCM it is necessary to work within the concept (Quality, Cost, Delivery).

Table 1 QCD concept (Quality, Cost, Delivery) [2]

Quality	Creation of the corresponding quality by good understanding of demands which are made by the client and ways of use of production. Achievement of production respect for appropriate level of quality. High-quality activity has to will focus on development of high-quality approach of management, assumes finding of ways to increase quality and to reduce defects.
Price	Production, within the competitive prices which are previously coordinated with clients. A problem of cost requires attention to logistic activity, namely the correct utilization which will allow to reduce the cost of production of a unit of production.
Delivery	Delivery of production upon the demand of the client (existence really requirements within the concept of Just In Time). As a rule it is very difficult for clients to predict demand, therefore, from the producer the flexibility on a short-term interval is required.

In practice it is required to define between what of characteristics of the concept of QCD the greatest failure and to take a number of measures for his elimination.

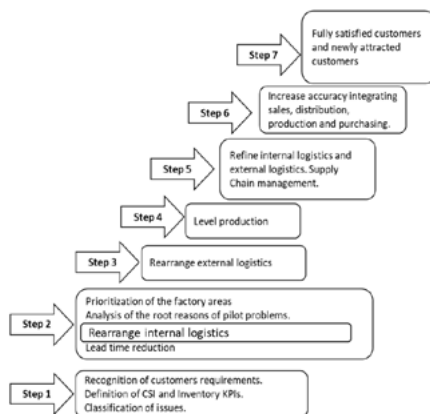
Quality activity will probably focus on development of high-quality approach of management, hoping to find ways to increase quality and to reduce defects.

The problem of pricing requires special attention, it is necessary to understand all components of which it is formed for objective vision, to logically define the directions which can reduce cost.

Delivery demands search of ways to increase flexibility of operation so that requirements of clients could be observed in time, every time

Then it is necessary to adhere to consecutive performance of all steps, for effective creation of a column of CSL.

At the moment the column of CSL of Kalina is on the second step. At a stage of reorganization of internal logistics the greatest expenses as for ensuring their maximum efficiency it is required changes of productions are assumed: modernization of production lines; reorganization of warehouse processes; reorganization of supply of lines, change of the principles of delivery; change of administrative approaches.



Pic. 2. 7 Steps of Customer Service & Logistics [11]

Reorganization of internal logistics is very expensive as it is required to pay attention to the next moments [6,8,9]:

- *Minimization of material handling.* Firstly, it is expenses, on the other hand they increase possibility of defects or delay and doesn't add for the client of value to a product.
- *Storage of optimum inventories at the end of each operation.* Each production site shall see how many it made. If there was an overproduction, it is necessary to stop production and to help the following section / operation for the purpose of creation of the synchronous flow between operations. Excessive production generates excessive inventories because of which double cargo processing.
- *Target and precisely during supply of materials (raw materials and packing) and return of an empty container and marriage.* Material has to be available to the production employee so close to a consumption point on how many it is possible from the point of view of safety. The operator shouldn't overcome long distances for material capture, otherwise it generates NVAA (Not Value Added Activities).
- *Supply of materials to production lines the optimized logistic stream.* The organization optimized logistic, for this purpose acts as the tool the logistic train which carries out supply of materials consecutive cycles which delivers materials sets.

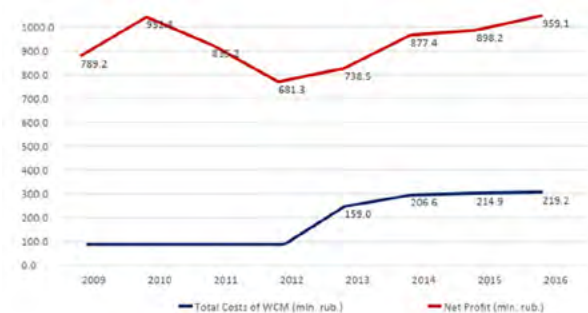
Table 2 Key economic indicators of LLC Unilever Rus Kalina 2009-2016, million rubles.

	Период							
	2009	2010	2011	2012	2013	2014	2015	2016
Total Revenue(mln. rub.)	10133,4	11532,1	12093,6	13645,2	14231,0	15343,4	15512,8	16023,5
Rate of a gain, %	-	13,8	4,9	12,8	4,3	7,8	1,1	3,3
Total costs, including Costs of introduction of WCM (mln. Rub.)	9081,2	10261,7	10980,0	12736,8	13246,3	14173,5	14315,3	14744,7
Rate of a gain, %	-	13,0	7,0	16,0	4,0	7,0	1,0	3,0
Total Costs of WCM (mln. Rub.)	0,0	0,0	0,0	0,0	159,0	206,6	214,9	219,2
Total Profit before taxes (mln. Rub.)	1052,2	1270,4	1113,6	908,4	984,7	1169,8	1197,5	1278,8
Net Profit (mln. Rub.)	789,2	952,8	835,2	681,3	738,5	877,4	898,2	959,1
Rate of a gain, %	-	20,7	-12,3	-18,4	8,4	18,8	2,4	6,8

In October, 2011 it has been declared that Kalina's shareholders have agreed about sale of a controlling stake of the company (82%) English-Dutch to Unilever concern, by 2012 Unilever Kalina consolidated 100% of stocks of concern. Since 2013 rough integration of Kalina into the system of Unilever within which it was required to increase level of production, on condition of maintaining appropriate level of quality of production and optimization of production expenses has begun. Introduction of World Class Manufacturing in production divisions of Kalina became a basic element of integration.

Before WCM introduction Kalina had the steady growth of revenue, but at the same time on net profit the negative gain was observed, therefore, more and more seriously it was possible to speak about reorganization of production and logistic processes. Since 2013 the company begins to integrate the concept of WCM on the production divisions, means are actively invested in the period since 2013 so far. As it is possible to notice, already on the termination of 2013, the company it is possible to slow down the rate of a gain of expenses and to increase gross revenue, in 2013 the company comes to a positive gain of net profit which has made 8,4%.

In 2014 the maximum gain of profit in recent years which is directly connected with increase in gross production which arises in the investigation of the fact that Kalina successfully passes the first stage of integration of the basic principles of WCM is fixed (such as JIT, Kayzen, the program for utilization, etc.). During the period since 2015-2016 the steady gain of net profit is observed, at delay of joint costs and building of revenue of the enterprise.



Pic. 3. Connection of WCM introduction costs and net profit of LLC Unilever Rus Kalina

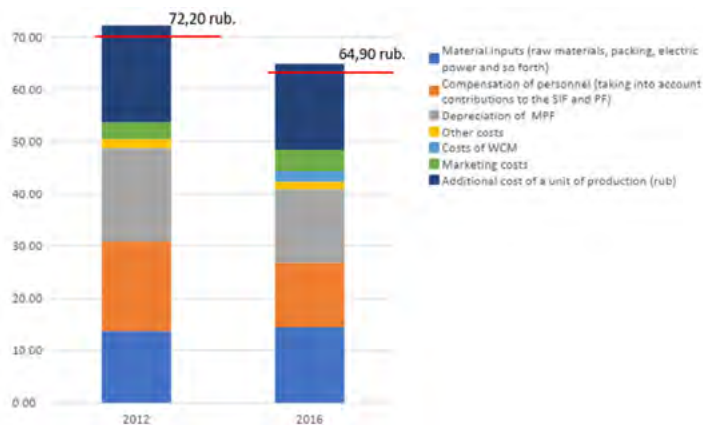
As appears from pic. 3, costs for introduction and fine-tuning of WCM gain the fixed character, with a stable growth of net profit. Therefore, generalizing told by me above, it is possible to say that introduction of WCM affects positively economic indicators of LLC Unilever Rus Kalina. It is worth to remember also about increase in level and quality of life of the population which is reached due to WCM introduction, way of competent recycling and decrease in harmful emissions in the atmosphere.

Table 3 Dynamics of factors of formation of the average price of sale of a unit of production of 2012-2016, rub.

Factors	2012		2016	
	Rub.	%	Rub.	%
Material inputs (raw materials, packing, electric power and so forth)	13,67	27,12	14,42	32,51
Compensation of personnel (taking into account contributions to the Social Insurance Fund and PF)	17,16	34,05	12,34	27,82
Depreciation of MPF	17,94	35,59	14,13	31,86
Other costs	1,63	3,24	1,36	3,07
Costs of WCM	0,00	0,00	2,11	4,75
Total average prime cost of a unit of production	50,40	100,00	44,35	100,00
Marketing costs	3,20	-	4,10	-
Average price of sales of products	72,2	-	64,9	-
Additional cost of a unit of production (rub)	18,60	-	16,45	-
Additional cost of a unit of production (%)	25,76	-	25,35	-

Introduction of WCM has allowed to optimize the processes proceeding in divisions of LLC Unilever Rus, decrease in average prime cost of a unit of production by 2016 in comparison with basic 2012 for 6,05 rub or for 12% has turned out to be consequence. In the conditions of increase in release, such indicators have been reached due to decrease in a share

of depreciation charges of OPF in prime cost of a unit of production from 35,59% to 31,86% and decrease in expenses on compensation of personnel taking into account contributions to the Social Insurance Fund and PF from 34,05% to 27,82%. Further for sales promotion of production in the conditions of the increasing production it has allowed to reduce the additional cost of a unit of production on average for 2,15 rub.



Pic. 4. Structure of the average price of the marketed production of LLC Unilever Rus Kalina 2012-2016.

Total by 2016 in the conditions of increase in overall price level on raw materials and accessories and the accruing competition, LLC Yunilever Rus Kalina has managed at the expense of optimization within introduction and adaptation of WCM in all divisions to reduce the average cost of unit of the marketed production from 72,90 rub to 64,90 rub or by 10%, on condition of growth of net profit for the end of 2016 which has made 40,77% since the moment of the beginning of introduction of WCM in 2012.

In general introductions of WCM not only reduction of price of sales of products and strengthening release, but also improvement of quality of products, increase in environmental friendliness of production, decrease in a human factor due to introduction of the technological optimization more motivated and employees, capable to sovershenstvovaniye, building of the base for all is result of new and new optimization and improvements.

All this speaks about in due time truly chosen direction of development of the company which will allow LLC Unilever Rus Kalina not only to hold a

market share, but also to increase it, first of all due to increase in sale of better production to foreign partners in more attractive prices.

During the conducted research, several reasons complicating adaptation of this concept in operating conditions of the Russian enterprises are established. One of the most important is personnel. Formation of personnel and management of it – here the most difficult task without which solution the long-term competitiveness of any organization in any country of the world is impossible.

Owing to various reasons, the rare enterprise can brag of level of training and qualification of personnel at all levels, and the personnel are a key factor of introduction of production concepts at the enterprise.

One more not less important condition is existence of a competent control system at the expense of which the effective plan of introduction and development of the enterprise will be created.

Despite all difficulties arising at introduction of a new production system at successful introduction of WCM at the enterprise it is possible to achieve superiority or equality with competitors in innovations, quality, the price, flexibility, discipline of deliveries and service. Moreover, application of the advanced techniques and achievement of successful results allow the enterprises to increase the authority, both on local, and on world the markets. At the macrolevel the investment attractiveness of the enterprise and the country in general as successful partner is formed.

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